

REMARKS

Petition for Extension of Time Under 37 CFR 1.136(a)

It is hereby requested that the term to respond to the Examiner's Action of December 11, 2007 be extended one month, from March 11, 2008 to April 11, 2008.

Authorization to charge a Credit Card is given to cover the extension fee. The Commissioner is hereby authorized to charge any additional fees associated with this communication to Deposit Account No. 19-5425.

In the Office Action, the Examiner indicated that claims 1 through 27 are pending in the application and the Examiner rejected all of the claims.

Claim Objections

On page 2 of the Office Action, the Examiner objected to claim 2 for containing the phrase "object thickness". Applicant has amended claim 2 in accordance with the Examiner's suggestion and accordingly, respectfully requests that the Examiner reconsider and withdraw the objection to claim 2.

The §101 Rejection

On page 2 of the Office Action, the Examiner has rejected claim 27 under 35 U.S.C. §101 as being directed to non-statutory subject matter. Applicant has cancelled claim 27, rendering this rejection moot.

The §112 Rejection

On page 3 of the Office Action, the Examiner has rejected claim 24 under 35 U.S.C. §112, second paragraph, as being indefinite. Applicant assumes that, although not specifically listed in the rejection, the Examiner meant to include claim 19 in this rejection since it is discussed under this heading. Applicant has amended claims 19 and 24 to overcome these rejections. Accordingly, the Examiner is respectfully requested to reconsider and withdraw the rejection of the claims under 35 U.S.C. §112, second paragraph.

Rejection of under 35 U.S.C. §§102 and 103

On page 3 of the Office Action, the Examiner rejected claims 1-14 and 16-27 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent Application Publication No. 2004/0141588 to Francke et al.

On page 4 of the Office Action, the Examiner has rejected claim 15 under 35 U.S.C. §103(a) as being unpatentable over Francke.

The Present Invention

The present invention relates to a method and arrangement for controlling exposure in an e-ray apparatus, for depicting an object. The apparatus comprises an x-ray source and a displaceable detector being arranged to move with a controllable speed across an image exposure area. The method comprises the step of: acquiring a signal relating to photons incident on at least a part of the detector, comparing said acquired signal with a target value, and controlling the speed of detector, displacement with respect to the result of the comparison.

U.S. Patent Application Publication No. 2004/0141588 to Francke et al.

U.S. Patent Application Publication No. 2004/0141588 to Francke et al. (“Francke”) relates to an apparatus for recording a 2D image of an object comprising a plurality of 1D detector units, each exposed to ionizing radiation, as transmitted through or scattered off the object, and being arranged for 1D imaging of the radiation, to which it is exposed. The detector units are distributed in an array such that the 1D images of the radiation from the detector units are distributed over a substantial portion of the 2D image. The apparatus includes a device for moving the detector units relative the object while the detector units repeatedly detect to create the 2D image of the object; and a control device for controlling the detector units to detect ionizing radiation during a short period of time before or during an initial part of the movement; calculating an optimum exposure time for the repeated detection based on the short period of time detection; and controlling the repeated detection to automatically obtain the optimum exposure time.

The Cited Prior Art Does Not Anticipate the Claimed Invention

The MPEP and case law provide the following definition of anticipation for the purposes of 35 U.S.C. §102:

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." (*Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987) M.P.E.P. §2131.

The Examiner Has Not Established a *Prima Facie* Case of Anticipation

First, Applicant notes that Francke is unrelated to real time exposure control as is the claimed invention. In fact, Francke teaches away from such technology. Specifically, the features:

- "The detector units are distributed in an array such that the 1D images of the radiation from the detector units are distributed over a substantial portion of the 2D image"
- "short period of time before or during an initial part of the movement"

indicate that an exposure control which can be controlled in real-time and is adapted for each part of the examined object is *not* possible. A first condition for functionality of exposure control as claimed herein is a detector that is narrow enough compared to the object to be examined, and a second condition is that the scanning movement is as long as possible, so that measurement is carried out continuously through the entire object such that all pixels obtain correct optimization, i.e. not the same optimization for the entire object.

Consequently, the cited document does not describe an exposure control as claimed, but instead describes conditions (distribution of a substantial portion of the 2D image, and a short period of time before or during an initial movement) indicative of being unable to perform real-time exposure control as claimed.

Moreover, Francke does not mention using an ROI from which the signal is obtained. This element, of course, is also expressly found in the claimed invention. Accordingly Franke neither teaches nor suggests the claimed invention, and the Examiner is respectfully requested to reconsider and withdraw the rejection of claims 1-14 and 16-27 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent Application Publication No. 2004/0141588 to Francke et al.

The Examiner Has Not Established a *Prima Facie* Case of Obviousness

As set forth in the MPEP:

To support a rejection under 35 U.S.C. §103, a reason, suggestion, or motivation to lead an inventor to combine two or more references must be found. *Pro-Mold and Tool Co. v. Great Lakes Plastics Inc.*, 37 U.S.P.Q.2d 1627, 1629 (Fed.Cir. 1996). The Examiner has not met his burden in establishing a reason, suggestion, or motivation for combining the cited references.

The assertion by the Examiner, that it would have been obvious to provide a relationship between the optimized scanning speed, does not supply the above-described claimed aspects neither taught nor suggested by Franke. Accordingly, the Examiner is respectfully requested to reconsider and withdraw the rejection of claim 15 under 35 USC §103.

Conclusion

The present invention is not taught or suggested by the prior art. Accordingly, the Examiner is respectfully requested to reconsider and withdraw the rejection of the claims. An early Notice of Allowance is earnestly solicited.

The Commissioner is hereby authorized to charge any fees associated with this communication to applicant's Deposit Account No. 19-5425.

Respectfully submitted

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Date

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